

Thursday, 9/14/2006 7:28:32 AM

User: Kim Johnston

## Process Sheet

SB 06/10/05

Customer : CU-DAR001 Dart Helicopters Services  
 Job Number : 28556  
 Estimate Number : 12183  
 P.O. Number : *N/A*  
 This Issue : 9/14/2006 S.O. No. : *N/A*  
 Prsht Rev. : NC  
 First Issue : *N/A* Type : SMALL / MED FAB  
 Previous Run : 26985  
 Written By :  
 Checked & Approved By : *06 09 14*  
 Comment : Est Rev: A New Issue 06-02-03 JLM

Drawing Name : TUBE ASSEMBLY  
 Part Number : D3469043  
 Drawing Number : D3469 REV A1  
 Project Number : N/A  
 Drawing Revision : A1  
 Material : *N/A*  
 Due Date : 10/6/2006 Qty: 4 Um: Each

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 D34691 TUBE



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	D3469-1	Tube	<i>B 27012</i>

2.0 D34695 LOWER PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

LOWER PLATE

Batch: *B28871*

3.0 AN960C416L WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
4	AN960C416L	Washer	<i>M100651</i>

SB 06/10/16 ①

SB 06/10/11 ①

4.0 SMALL FAB 1 SMALL &amp; MEDIUM FAB RESOURCE 1



Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

1-Assemble as per Dwg D3469 Using Dt8849 Assembly Jig, Use 1/4" Shaft To Align Butterfly Shaft holes

2-Spot Weld as per Dwg D3469 and Dart QSI 018

MF.




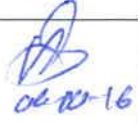
06/10/11

①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/10/18  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/10/18	4	1 part hole didn't align		Scrap + destroy	SB 06/10/18	 06-10-18		 06-10-18

NOTE: Date & initial all entries

ate: Thursday, 9/14/2006 7:28:32 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 28556

Part Number: D3469043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

SB 06/10/14

①

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

SB 06/10/14

①

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

SB 06/10/14

①

U 06.10.14

Job Completion

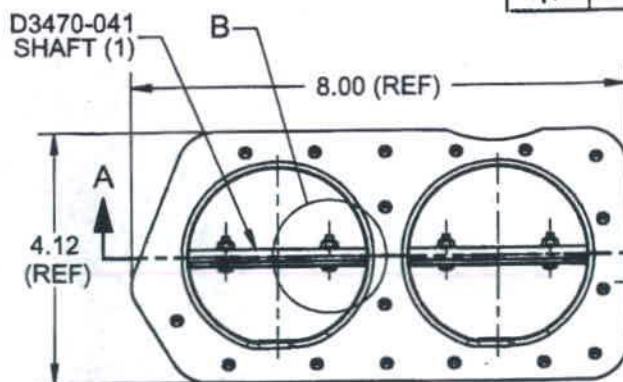






**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3469</b>	REV. A SHEET 1 OF 5
DATE <b>05.12.12</b>		TITLE <b>SHUT-OFF VALVE ASS'Y</b>	SCALE 1:3
A	05.12.12	NEW ISSUE	
A1	06.04.20	CORRECTED B.O.M. on PAGE 2	

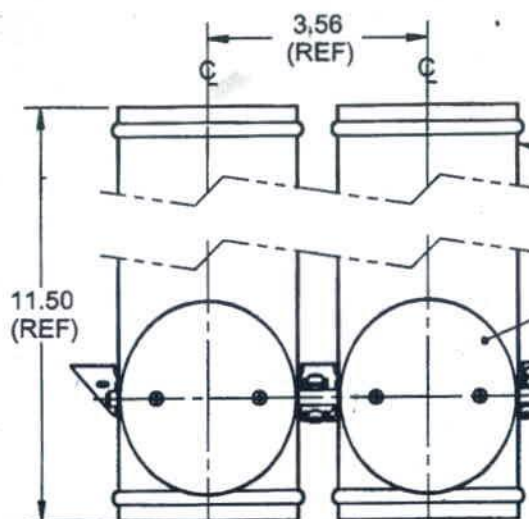
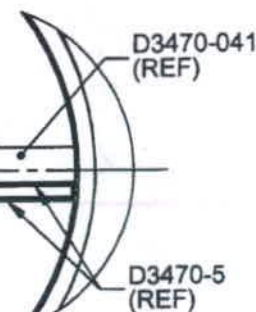


MS35206-217 SCREW  
AN960-4L WASHER  
NAS679-A04 NUT  
(4 PLACES)

D3470-7  
BUTTERFLY  
VALVE SEAL  
(2 PLACES)

MS24665-153  
COTTER PIN (1)

**DETAIL B**  
**SCALE 1:1**



**SECTION A-A**

06.04.03 *[Signature]*

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WITHOUT NOTICE  
WORK ORDER  
28556

### **D3469-041 SHUT-OFF VALVE ASS'Y**

#### **NOTES:**

- 1) IDENTIFY WITH DART P/N D3469-041 USING FINE POINT PERMANENT INK MARKER
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3469-041	SHUT-OFF VALVE ASSEMBLY
1	D3469-043	TUBE ASSEMBLY
1	D3470-041	SHUT-OFF VALVE SHAFT
4	D3470-5	BUTTERFLY VALVE
2	D3470-7	BUTTERFLY VALVE SEAL
1	D3470-9	BOLT
1	AN310-4	NUT
4	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
4	MS35206-217	SCREW
4	NAS679-A04	NUT

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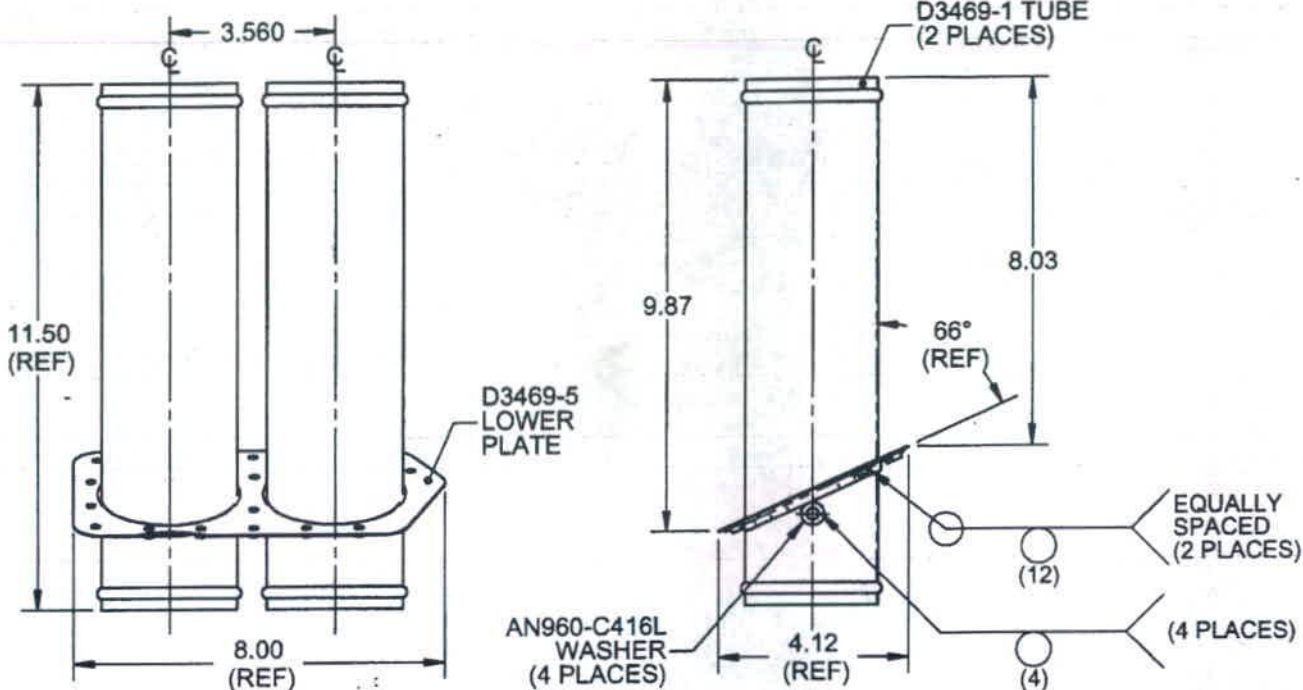
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**DART**

DESIGN B	DRAWN BY B	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3469	REV. A SHEET 2 OF 5
DATE 05.12.12		TITLE SHUT-OFF VALVE ASS'Y	SCALE 1:4



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WITHOUT NOTICE  
WORK ORDER  
NO. 28576

### D3469-043 TUBE ASSEMBLY

#### NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -043	P/N	DESCRIPTION
X	D3469-043	TUBE ASSEMBLY
2	D3469-1	TUBE
1	D3469-5	LOWER PLATE
4	D3470-5	PLATE VALVE
4	AN960-C416L	WASHER

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NO. 33

*Scrap*

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name Melanie Fauteux  
Joint Welding Procedure Spot Welding  
Part number and Job number D3469-043 B28556

TEST WELDS REQUIRED

BASE METAL 304 26G WELDING PROCESS Spot  
Penetration Complete ☐ Partial ☐ Single Weld ☐ Double Weld ☐  
Current AC ☐ DC ☒ Backing YES ☐ NO ☐ N/A

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

*N/A*

Crossbolt Spacer Welded into \_\_\_\_\_ Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐  
Penetration Pass ☒ Fail ☐

Crossbolt Spacer Pass ☐ Fail ☐ *N/A*

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 06/10/11 Qualifier Sylvie Pouchet



NO. 36

# AWS D17.1.2001 QUALIFICATION TEST RECORD

Name Melanie Fauten  
 Joint Welding Procedure Spot Welding  
 Part number and Job number D3469-043 B28552

## TEST WELDS REQUIRED

BASE METAL	<u>304 2G</u>		WELDING PROCESS	<u>Spot</u>
Penetration	Complete <input checked="" type="checkbox"/>	Partial <input type="checkbox"/>	Single Weld <input type="checkbox"/>	Double Weld <input type="checkbox"/>
Current AC <input type="checkbox"/>	DC <input checked="" type="checkbox"/>		Backing YES <input type="checkbox"/>	NO <input type="checkbox"/> <u>N/A</u>
	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into \_\_\_\_\_ Skidtube

## TEST RESULTS

Visual Pass ☒ Fail ☐  
 Penetration Pass ☒ Fail ☐

Crossbolt Spacer Pass ☐ Fail ☐ N/A

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 06/10/14 Qualifier Sylvie Souder





# SPOT WELD TEST RECORD

AMS-W-6858A

CLASS ' C '

TEST NO: 36 replaces original

EMPLOYEE: Melanie Fautaux

PART NUMBER: B3469-043

JOB NUMBER: B20556

MATERIAL TYPE: SS 304

MATERIAL THICKNESS: .018

GROUP SPECIFICATION: 2

Group 1: Aluminum & magnesium

Group 2: Iron; nickel; cobalt

Group 3: Titanium

## TEST RESULTS

PASS FAIL

VISUAL: [✓] [ ] [ ]

PENETRATION: [✓] [ ] [ ]

STRENGTH: [✓] [ ] [ ]

The individual named above has been trained and is qualified in accordance with standard AMS-W-6858A, and QSI 004 ( ref: 4.3 )

DATE OF TEST COUPON: 06-10-13

QUALIFIER: [Signature]

111

1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

2. In the second part, the author discusses the results of his own experiments on the structure of the atom.

3. The third part of the paper is devoted to a discussion of the results of his own experiments on the structure of the atom.

4. The fourth part of the paper is devoted to a discussion of the results of his own experiments on the structure of the atom.

5. The fifth part of the paper is devoted to a discussion of the results of his own experiments on the structure of the atom.

6. The sixth part of the paper is devoted to a discussion of the results of his own experiments on the structure of the atom.